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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,882	11/28/2001	John H. Hales	2001-IP-00579 U1 USA	1615

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EXAMINER

NEUDER, WILLIAM P

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 01/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,882

Applicant(s)

HALES ET AL.

Examiner

William P Neuder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34, 40-46, 52 and 54-59 is/are rejected.
- 7) ☒ Claim(s) 35-39, 47-51 and 53 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Streich et al.

Streich discloses a method of operating an actuatable well tool. The well tool being valves 214,216,218. The tool is placed downhole. The valves may be actuated by use of electromagnetic telemetry. See col. 7, par. 0059. In order to operate the vales by electromagnetic telemetry it is inherent that the waves must be detected and the tool

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actuate in response to the waves. As to claims 2 and 3, the valves are mechanically actuated and are placed in the well on a tubing string.

Claims 1-3,9-11,13,17,24,25,27-29,33,34,40-42 and 44-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Beck et al.

Beck discloses a downhole force generator and method of operating a downhole tool. The downhole device 6 can be a valve or similar device operated by linear motion. The device 6 is operated by electromagnetic waves transmitted through the earth. As to claims 2 and 3, the device 6 is a mechanically operated device that is lowered into the well on a tubing string. As to claim 9, col. 5, lines 15-17 state "Such a transmitted control signal can come from a surface unit that sends a suitably addressed or otherwise recognizable command." As to claim 10, a receiver is provided to detect the electromagnetic waves. As to claim 27, a motor is provided in the power unit 2. As to claim 28, the motor has an output member translatable in a selected direction. As to claim 29, the above ground transmitter is not shown (col.5, lines 15-17). As to claim 34, the waves would have some predetermined frequency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-11, 13-17, 24, 25, 29-33, 34, 40-42, 46, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Streich et al.

Streich has been described above. As to claims 6-8, Streich is silent as to the wave frequency and configuration. The configuration of the wave and the frequency of the wave would have been considered an obvious design choice arrived at by routine experimentation by one of ordinary skill in the art since the wave configuration and frequency could be selected in any manner which would provide adequate representation of the signal to actuate the downhole tool. As to claim 10, it would have

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been considered obvious to provide a receiver for receiving the electromagnetic waves since some means of receiving the signal must be present in order for the waves to actuate the downhole tool. As to claim 29, some form of transmitter must be provided. As to claims 56 and 57, the valves are spaced apart.

Claims 6-8, 14-16 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al.

Beck has been described above. As to claims 6-8, Beck is silent as to the wave frequency and configuration. The configuration of the wave and the frequency of the wave would have been considered an obvious design choice arrived at by routine experimentation by one of ordinary skill in the art since the wave configuration and frequency could be selected in any manner which would provide adequate representation of the signal to actuate the downhole tool.

Claims 1-34, 40-46, 52 and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzalez in view of Beck et al.

Gonzalez discloses an apparatus and method of operating spaced apart downhole perforating guns using electromagnetic waves transmitted through the tubing string to a receiver or decoder which then mechanically fires the designated perforating guns. Gonzalez is considered to disclose all of the claimed limitations except for the wave frequency and configuration that as has been pointed out above are considered obvious design choices, and the electromagnetic waves being transmitted through the earth. Beck et al teaches that it is known to transmit electromagnetic waves through the earth to operate downhole tools. Beck further teaches that the signal can be sent by

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numerous ways, either electromagnetic waves sent through the earth or electric signals transmitted over the tubing. Beck, therefore, is considered to teach that the signals for actuation could be transmitted through the tubing or through the earth. It would have been considered obvious to transmit the electromagnetic waves of Gonzalez through the earth as taught by Beck et al which is considered to teach that it is equivalent to transmit the operating signals through the tubing or through the earth.

Claims 4,5,12,18-23,26,43,52 and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al in view of Gonzalez.

Beck is described above and is considered to disclose all of the claimed features as set forth above, except for the downhole-actuated tool being a perforating gun or spaced guns. Gonzalez teaches that downhole spaced perforating guns can be actuated by electromagnetic waves. It would have been considered obvious to use perforating guns as the downhole actuated device in Beck et al as taught by Gonzalez in view of Beck et al's statement that the device 6 can be selected from numerous tools as long as they require linear motion to operate.

Allowable Subject Matter

Claims 35-39,47-51 and 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P Neuder whose telephone number is 703-308-2150. The examiner can normally be reached on Tuesday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 703-308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.



William P Neuder
Primary Examiner
Art Unit 3672

W.P.N.
January 4, 2003